



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/789,269	02/26/2004	Bobby Gene Miller	MILL 2676	9401
7812	7590	03/30/2007	EXAMINER	
SMITH-HILL AND BEDELL, P.C. 16100 NW CORNELL ROAD, SUITE 220 BEAVERTON, OR 97006			SANDERS, JANIS C	
			ART UNIT	PAPER NUMBER
			1732	

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	03/30/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

Office Action Summary	Application No.	Applicant(s)	
	10/789,269	MILLER, BOBBY GENE	
	Examiner	Art Unit	
	Janis Sanders	1732	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on 26 February 2004.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-5 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-5 is/are rejected.
- 7) Claim(s) _____ is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112, second paragraph

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 5 recites the limitations "bond-breaker." There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eyring et al. in view of Peng et al.

Claim 1 requires a method of forming an impression in a concrete surface utilizing a form-liner. Eyring et al. (US 6,279,868) teaches a concrete building floor is normally poured in place and is then coated with a release agent to form a horizontal forming surface for the wall panels (column 1, lines 8-10). Concrete is poured within the forms (column 1, lines 13-14), and the concrete wall panels are cured (column 1, line 16). Eyring et al. discloses using a releasing agent and the pouring and setting of concrete, however the reference does not teach of applying adhesive material to coating release agent or reveal strip.

Peng et al. (US 2002/0100249) teaches the formation of an adhesive layer. The adhesive is applied to the surface of a film [0030]. A second layer of adhesive is formed on the opposing side surfaces of the substrate so as to bond the protective cover to the peripheral edges of the substrate [0053].

It is considered by the office that the term "reveal strip" includes any linear shaped material, including plastic, metal, compressed fiber, wood or rubber, that is attached to the inside of an upright poured-in-place concrete wall form to render a design, impression or shape within the exterior surface(s) of the completed poured-in-place concrete wall - as defended by the instant specification. Hence forth, the film disclosed by Peng et al is considered to meet the reveal strip as required by the claim.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Eyring et al. to include the applying of adhesive layers to both a reveal strip and concrete panel as taught by Peng et al. One of ordinary skill would have been motivated to do so to improve methods of reveal impression setting within concrete panels; and to allow a protective film to provide the concrete substrate with resistance to weathering and maintaining the surface texture of the underlying concrete substrate while providing an aesthetically pleasing and uniform pre-finish on the exterior surface (Peng – abstract). Because all references are concerned with the setting and curing of solid materials to concrete for construction materials, one would have a reasonable expectation of success from the combination.

4. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Eyring et al. in view of Peng et al., and further in view of Scuri.

Art Unit: 1732

Eyring et al. (US 6,279,868) teaches a concrete building floor is normally poured in place and is then coated with a release agent to form a horizontal forming surface for the wall panels (column 1, lines 8-10). Concrete is poured within the forms (column 1, lines 13-14), and the concrete wall panels are cured (column 1, line 16). Eyring et al. discloses using a releasing agent and the pouring and setting of concrete, however the reference does not teach of applying adhesive material to coating release agent or reveal strip.

Peng et al. (US 2002/0100249) teaches the formation of an adhesive layer. The adhesive is applied to the surface of a film [0030]. A second layer of adhesive is formed on the opposing side surfaces of the substrate so as to bond the protective cover to the peripheral edges of the substrate [0053].

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Eyring et al. to include the applying of adhesive layers to both a reveal strip/ form-liner and concrete panel as taught by Peng et al. One of ordinary skill would have been motivated to do so to improve methods of forming impressions within concrete panels; and to allow a protective film to provide the concrete substrate with resistance to weathering and maintaining the surface texture of the underlying concrete substrate while providing an aesthetically pleasing and uniform pre-finish on the exterior surface (Peng – abstract). Because all references are concerned with the setting and curing of solid materials to concrete for construction materials, one would have a reasonable expectation of success from the combination.

The combined teachings of Eyring/Peng further do not teach of installing pour in place concrete forms opposite each other before concrete pouring.

Suri (US 5,057,258) teaches a method of form liner use for forming concrete structures. Form liner is used to line the interior of the concrete form and concrete is poured into the form and allowed to set (column 4, lines 24-27).

It is considered by the office that the terms "reveal strip" and "form-liner" both include any shaped material, including plastic, metal, compressed fiber, wood or rubber, that is attached to the inside of an upright poured-in-place concrete wall form to render a design, impression or shape within the exterior surface(s) of the completed poured-in-place concrete wall - as defended by the instant specification. Hence forth, the form-liner disclosed by Suri, is considered to meet the reveal strip as required by claim 3.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Eyring et al in view of Peng et al. to include installing the pour in place concrete forms, lined with form-liners, one opposite another form, then pouring in liquid concrete between forms as taught by Suri. One of ordinary skill would have been motivated to do so to improve methods of reveal impression setting within concrete panels, utilizing various solid materials. Because all references are concerned with the setting and curing of solid materials to concrete for construction materials, one would have a reasonable expectation of success from the combination.

5. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Peng et al. in view of Pater.

Claim 4 requires a method of attaching expansion joint material to a solid surface. Peng et al. (US 2002/0100249) teaches the formation of an adhesive layer. The adhesive is applied to the surface of a film [0030]. A second layer of adhesive is formed on the opposing side surfaces of the substrate so as to bond the protective cover to the peripheral edges of the substrate [0053]. Peng et al. does not teach of applying adhesive material to an expansion joint material, and pouring liquid concrete against.

Pater et al. (US 1,665,718) teaches at times it may be desirable to place an adhesive coat on the exterior side of the joint (column 3, lines 13-16). The adhesive coat would only be used where it was desirable to give greater adhesion between the joint and adjacent structure (column 3, lines 17-20). Expansion joints are adapted to be sufficiently board-like to permit of their being installed in place or used as a portion or side of the mold when concrete is being laid (column 1, lines 17-24).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Peng et al. to include the attaching of expansion joint materials to solid surfaces as taught by Pater. One of ordinary skill would have been motivated to do so to improve adhesion of expansion joints to concrete surfaces. Because all references are concerned with the adhesion of solid

Art Unit: 1732

materials to concrete for construction materials, one would have a reasonable expectation of success from the combination.

6. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Eyring et al. in view of Peng et al, and further in view of Colefax et al.

Claim 5 requires a method for reducing spalling and ragged edges along saw-cut expansion joints cut into a concrete surface. Eyring et al. (US 6,279,868) teaches of a concrete floor with the surface sprayed with a concrete release agent (column2, lines12-13). Eyring et al. discloses using a releasing agent on concrete, however the reference does not teach of applying adhesive material to concrete surface or marking and cutting on a saw-cut line.

Peng et al. (US 2002/0100249) teaches the formation of an adhesive layer. The adhesive is applied to either a surface of the film or a surface of the cement substrate [0030]. Peng et al. discloses applying adhesive material to concrete surface and/or a film surface.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Eyring et al. to include applying a layer of adhesive material to a coated concrete surface as taught by Peng et al. One of ordinary skill would have been motivated to do so to allow a protective layer to provide the concrete substrate with resistance to weathering and maintaining the surface texture of the concrete substrate while providing an aesthetically pleasing and uniform pre-finish on the exterior surface (Peng – abstract). Because all references are concerned

with the preparation and curing of concrete for construction materials, one would have a reasonable expectation of success from the combination.

The combined teachings of Eyring in view of Peng further do not teach marking a saw-cut line on the concrete surface, and saw cutting the concrete along the saw-cut line through adhesive and release agent coatings.

Colefax et al. (US 2003/0115823) teaches to limit cracking to the saw cut locations and generally attempts to control cracking to straight lines [0006]. The joint is orientated in line with a saw cut, which is made after the concrete has set [0010]. The depth of a suitable saw cut is typically twenty five percent of the total thickness of the slab and the spacing is typically three to six meters. To achieve a relatively smooth finish and to seal the joint, saw cuts are usually filled with a suitable elastomeric material [0006].

Eyring et al. as modified by Peng et al., further modified by Colefax et al. does not teach of the following parameters: applying an approximately 3-inch wide layer of a releasing agent to the concrete surface along the length of the saw-cut line; and applying adhesive material to the approximately 3-inch wide layer of a releasing agent along the length of the saw-cut line. Colefax et al. (US 2003/0115823) discloses the depth of a suitable saw cut is typically twenty five percent of the total thickness of the slab and the spacing is typically three to six meters [0006]. One of ordinary skill would recognize that the parameters would affect the surface area of the concrete substrate treated with the adhesive/releasing agent protective coating, therefore reducing spalling and ragged edges in the designated concrete surface during saw cutting.

It would have been obvious to one having ordinary skill in the art at the time the invention was made to choose the instantly claimed ranges through process optimization, since it has been held that when the general condition of a claim is disclosed in the prior art, discovering the optimal or workable ranges involves only routine skill in the art. See *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to further modify the method of Eyring et al. in view of Peng to mark a saw-cut line upon the concrete surface and cut along it as taught by Colefax et al. One of ordinary skill would have been motivated to do so, providing a protective layer to reduce cracking at expansion joint locations while concrete cutting. Because all references are concerned with the development of concrete for construction materials, one would have a reasonable expectation of success from the combination.

Remarks

7. No claim is allowed.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Heritage et al. (US 2,296,553), Peng et al. (US 2002/0169271), Barenberg et al. (US 2004/0025858), Bramlett et al. (US 6,395,401), Peng (US

2003/0136072), Lehto et al. (WO 02/063115) disclose method of making concrete panels for construction materials.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Janis Sanders whose telephone number is 571-272-7145. The examiner can normally be reached on M-Th and alternating Fridays 7:30-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571-272-1176. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Application/Control Number: 10/789,269
Art Unit: 1732

Page 12

Janis Sanders
Patent Examiner
Art Unit 1732

3/19/07

crf
CHRISTINA JOHNSON
SUPERVISORY PATENT EXAMINER
3/28/07